Utah NAEP 2005 Trends:
Further
Achievement Gap
Analyses of Key
Subgroups in Reading,
Math & Science





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May 24, 2006

Introduction and Purpose

NAEP is the only nationally representative and continuing assessment that demonstrates what America's students know and can do in various subject areas. NAEP first started tracking national performance in 1969. Beginning in 1992, NAEP conducted assessments for the individual states. A key role of State-by-State NAEP is assisting in evaluating the conditions and progress of student achievement at grades four and eight.

The advantage of NAEP is that it allows comparison of results from one state with those of another, or with results for the rest of the nation. NAEP provides a line of evidence for states that can help answer such questions as: How does the performance of students in my state compare with the performance in other states with similar resources or students? How does my state's performance compare with the regions?

The current report goes into further analysis of NAEP findings in math, reading and science for grades four and eight. A particular focus is on the role of being low income (as indicated by qualifying for free/reduced price lunch) and being classified as being English Language Learner (ELL). For this report and analysis, an achievement gap can be defined as "a persistent and pervasive disparity in student achievement among different groups of students. A gap may also be the difference between a group's current performance and a state or district standard of performance (e.g., 80% of students will be proficient)."

Data

The National Center of Educational Statistics (NCES), through the work of its test contractors, collected data between 1992 through 2005. The results in this report were first published by NCES. The NAEP reports in Reading and Math can be found at http://nces.ed.gov/pubsearch/getpubcats.asp?sid=031. The majority of the results were gathered using the public data available on NAEP's website at http://nces.ed.gov/nationsreportcard/naepdata/. For grade eight, state NAEP draws a representative sample of approximately 3,000 students from 200 Utah schools. The Hispanic subgroup is slightly over-sampled (along with other key reporting groups) to improve the population estimate (i.e., 12% to 14% of the eighth grade sample). Therefore, approximately 300 to 350 Hispanic eighth graders participated in 2003 Utah NAEP. A similar approach to sampling has been used from 1992 through 2005 by NAEP.

It is important to note that NAEP began allowing more accommodations throughout the 1990s for students with disabilities and English language learners (ELLs). Therefore, there were instances in which some students were allowed accommodations and other students were not. Another key data element in which collection methods have changed is the critical area of race/ethnicity. Only recently has the primary source for reporting a student's racial/ethnic group become school records.

Results

NAEP tests a representative sample of approximately 3,000 eighth grade students. To reduce test time and school burden, each student takes approximately one-quarter of the NAEP test. This method allows for group comparisons but not individual-to-individual comparisons. NAEP provides state-level results and results for major reporting categories.

READING





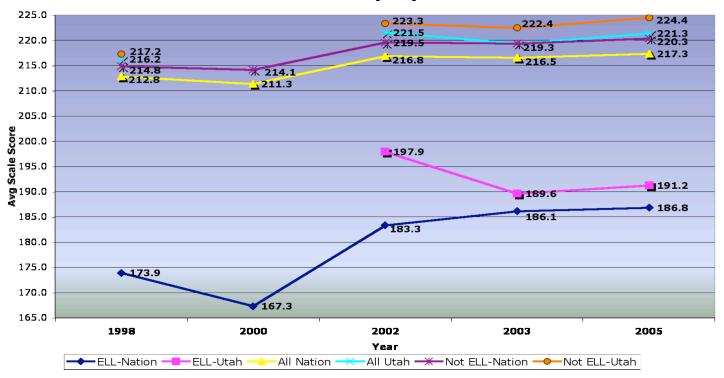
Key Findings: All groups have made statistically significant increases from 1998 to 2005 (Free/Reduced Price Lunch Eligible students for the nation 7.3, and Utah 2.7, those students **not** eligible for free/reduced price lunch, nation 3.9, and Utah 6.7 scale score points). The achievement gap between these groups is 27 scale score points for the nation in 2005, and 21 scale score points for Utah in 2005.

NAEP 8th Grade Reading: Utah and Nation by Free/Reduced Lunch Price Status



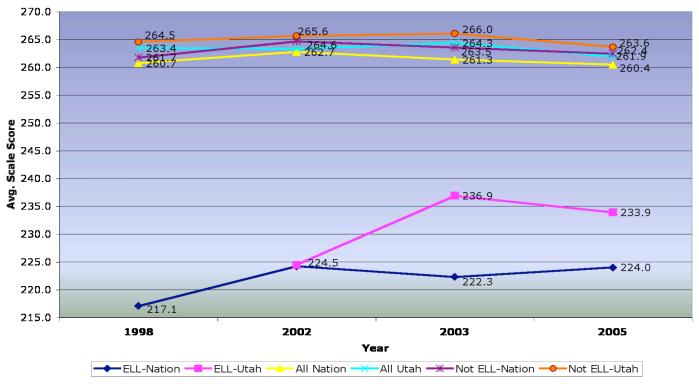
Key Findings: The group with a greatest gain between 1998 and 2005 was Utah 8th graders eligible for free/reduced price lunch (5.8 scale score points). For the other groups there are only slight increases or decreases that were not statistically significant. The achievement gap by income status, for the nation, has remained level from 1998 to 2005. Utah's achievement gap in this area has decreased due to the increased reading performance of Utah 8th graders who are eligible for free or reduced price lunch and the decrease in performance of students who are not eligible for free/reduced price lunch.

NAEP 4th Reading: Utah and the Nation by English Language Learner (ELL) Status



Key Findings: The largest increases were by 4th grade ELL students in the nation between 1998 and 2005 (12.9 scale score increase). In Utah, student's who are ELL decreased 6.6 scale score points from 1998 to 2005. The remaining groups were increasing around 5 to 7 scale score points. The scale score increases for student's who are not ELL for Utah and the nation were statistically significant. Nationally the achievement gap has decreased for these ELL groups from 1998 to 2005. In Utah, the achievement gap for these ELL status groups has increased from 2002 to 2005 due to the decrease in performance of 4th grade ELL students during this time.

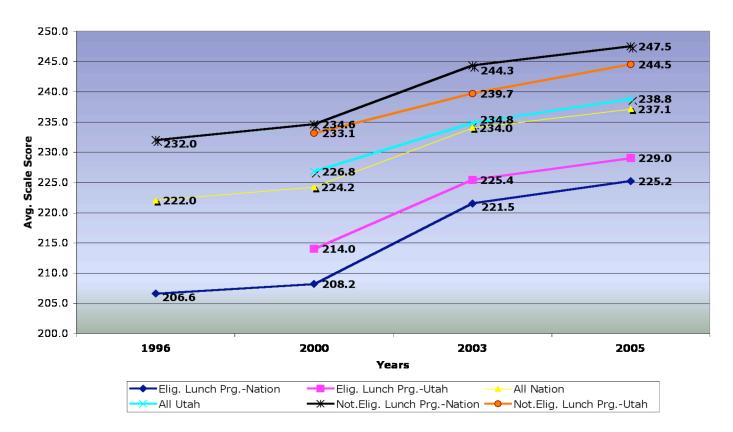
8th Grade NAEP Reading for Utah and the Nation by English Lanuage Learner (ELL) Status



Key Findings: ELL 8th graders in Utah had the largest scale score increase from 2002 to 2005. In Utah there was a slight decrease (not statistically significant) for students who are **not** ELL from 1998 to 2005.

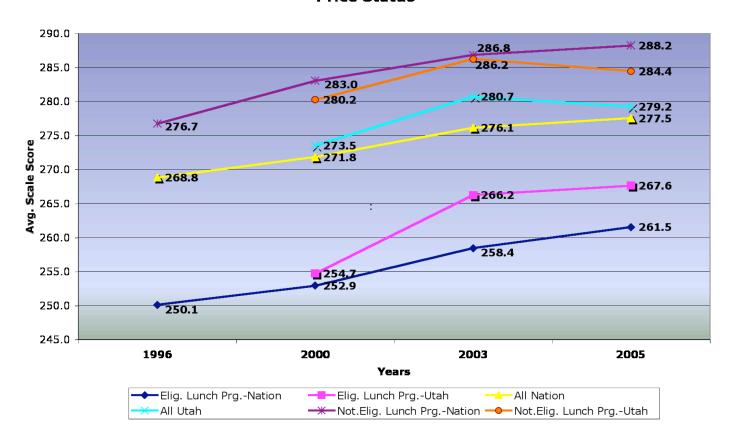
MATHEMATICS

4th Grade NAEP Math: Utah and the Nation by Free/Reduced Price Lunch Status



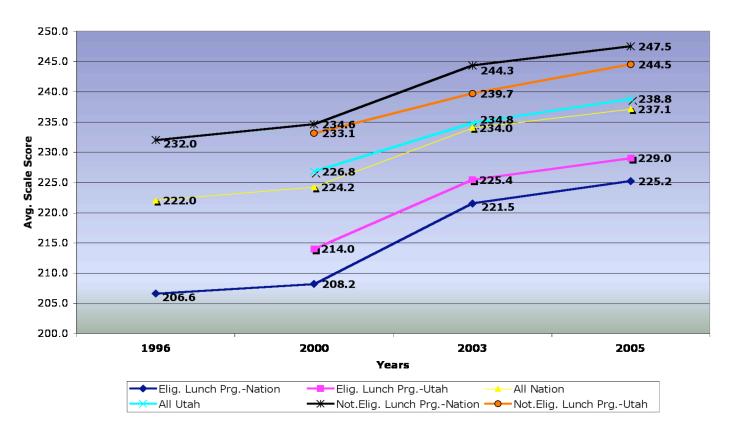
Key Findings: There were statistically significant increases for all groups from 2000 to 2005. The largest math increases were by students in the nation who were eligible for free/reduced price lunch (increase 18.6 scale score points). For the other groups, the average scale score increase ranged from 12 to 15 scale score points. The achievement gap in math (between eligible and not eligible free/reduced price lunch) for the nation is 22.3 scale score points. For Utah, the achievement gap is 15.5 scale score points

8th Grade NAEP Math: Utah and the Nation by Free/Reduced Lunch Price Status



Key Findings: All groups had statistically significant increases from 2000 to 2005. The largest average scale score increase was for Utah 8th graders who were eligible for free/reduced price lunch (12.9 scale score points). For students who were **not** low income the gains were 4.2 for Utah and 5.2 for the nation. The achievement gap over this time has decreased in Utah from 25.5 in 2000 to 16.8 in 2005.

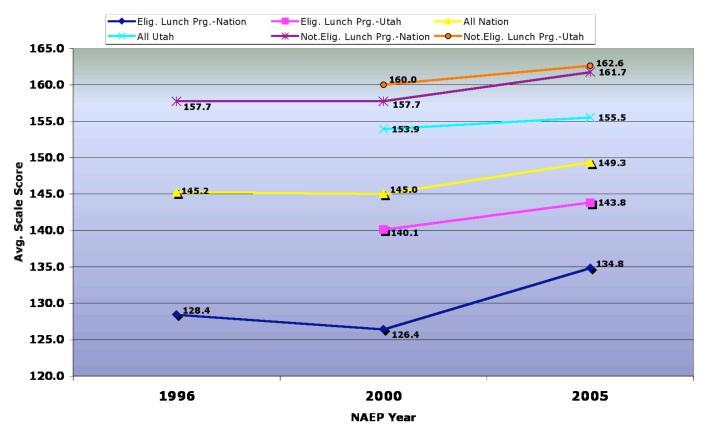
4th Grade NAEP Math: Utah and the Nation by Free/Reduced Price Lunch Status



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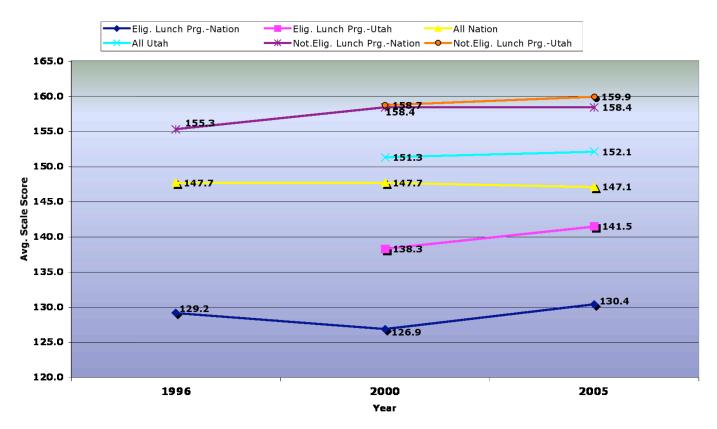
SCIENCE

4th Grade NAEP Science 2005: Utah and the Nation by Free/Reduced Price Status



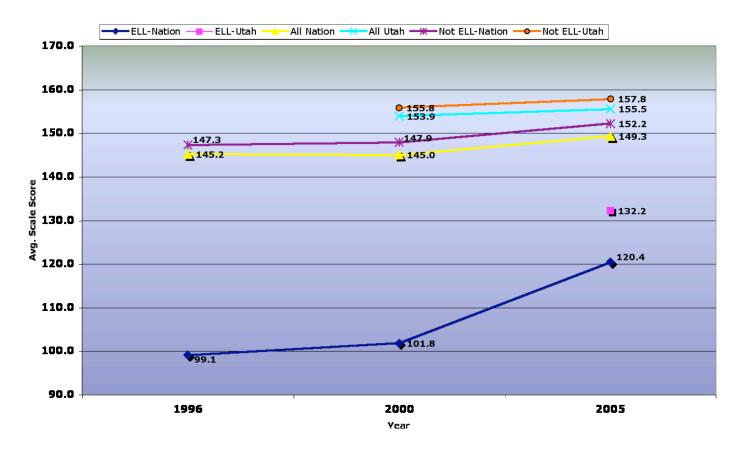
Key Findings: In the nation there were statistically significant increases from 2000 to 2005 for fourth grade students who were eligible for free/reduced price lunch. There was also a statistically significant gain for fourth graders in the nation overall. Utah fourth grade students who were eligible for free/reduced price lunch in 2005 scored higher than fourth grade students in the nation who were eligible for free/reduced price lunch (143.8 vs., 134.8, respectively).

8th Grade NAEP Science: Utah and the Nation by Free/Reduced Price Lunch Status



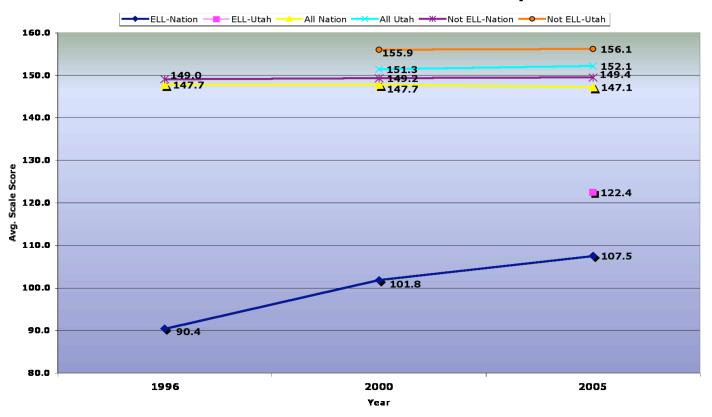
Key Findings: The groups with statistically significant increases were eighth graders in the nation who were eligible for free/reduced price lunch. Almost all other groups remained level between 2000 and 2005. Utah eighth graders who were eligible for free/reduced price lunch in 2005 scored higher than eighth graders in the nation who were eligible for free/reduced price lunch (141.5 vs., 130.4, respectively).

4th Grade NAEP Science: Utah and the Nation by ELL Status



Key Findings: Overall fourth graders in the nation had statistically significant increases from 2000 to 2005. Another group with significant increases from 2000 to 2005 was fourth graders in the nation who were ELL. In Utah, ELL fourth graders have a statistically significant higher scale score than ELL students in the nation in 2005 (132.2 vs. 120.4, respectively).

8th Grade NAEP Science: Utah and the Nation by ELL Status



Key Findings:

Overall, findings for 8th graders in Utah and the nation remained level between 2000 and 2005. In Utah, ELL eighth graders have a statistically significant higher scale score than ELL students in the nation in 2005 (122.4 vs. 107.5, respectively).